

ABSTRACT

A scanning electron microscope in the present invention includes an electron source 1 to radiate an electron beam, an objective lens system 9 to focus the radiated electron beam on a sample 10, scanning systems 5, 8 to scan the focused electron beam on the sample, secondary electron detection systems 3,4 to detect secondary electrons emitted from the sample 10, and a secondary electron image displaying system 13 to display a secondary electron image of the sample 10 with a secondary electron detection signal from the secondary electron detection system.

The objective lens 9 is composed of first and second objective lenses 11, 12. The first objective lens 11 is mainly excited when using in a wide visual field mode and the second objective lens 12 is mainly excited when using in a high resolution mode.